Professional and Managerial Branch Miscellaneous Professional Group Sciences Series **SENIOR CHEMIST** 

04/03 (AM)

## General Purpose

Under direction, direct chemical and bacteriological analyses of water and wastewater samples through subordinate supervisors.

#### **Typical Duties**

Plan, assign and coordinate the collection and analysis of water and wastewater samples. Involves: Conduct required analyses of water and wastewater samples to assure water and wastewater quality conforms to federal, state and local standards. Maintain records of samples collected and test results. Operate and maintain special laboratory equipment including advanced spectrophotometry and advanced chromatography. Use a computer to analyze and maintain records of data collection, samples tested and results.

Supervise assigned supervisory and non-supervisory professional and administrative support employees. Involves: Schedule, assign, instruct, guide and check work. Evaluate employee performance and review appraisals prepared by subordinates. Arrange for or engage in employee training and development. Enforce personnel rules and regulations, standards of conduct, work attendance, and safe working practices. Counsel, motivate and maintain harmonious working relationships among subordinates. Recommend staffing and employee status changes. Interview applicants and recommend selection.

Perform other duties as assigned. Involves: Maintain current knowledge of chemical testing equipment and procedures and federal, state and local legislation pertaining to water quality testing regulations and standards. Substitute for coworkers or supervisor during temporary absences to maintain continuity of operations. Research and recommend the purchase of new laboratory equipment. Maintain records and prepare reports.

# Knowledge, Abilities and Skills

- Good knowledge of equipment and techniques used in a chemical analysis laboratory, including chain of custody and quality control and assurance procedures.
- Good knowledge of chemistry and bacteriology theories, principles and practices.
- Good knowledge of federal, state and local standards.
- Good knowledge of use and care of special chemical analysis equipment.
- Good knowledge of safe working practices and equipment of the profession, including effects of chemicals used.
- Good knowledge of supervisory methods.
- Ability to perform laboratory analyses to determine water quality.
- Ability to research new analytical methods and equipment and recommend their purchase.
- Ability to understand and follow oral and written instruction.
- Ability to establish and maintain effective working relationships with fellow employees.
- Ability to maintain test results records and prepare reports.
- Skills in safe use and care of laboratory equipment and chemicals.
- Skill in the safe use and care of personal computers or network workstation and generic and specialized software applications for documenting tests results, including graphics.
- Skill in safe operation and care of a motor vehicle through city traffic.

# Other Job Characteristics

- Frequent exposure to laboratory environment.
- Frequent exposure to hazardous chemicals.

## Minimum Qualification

<u>Training and Experience</u>: Equivalent to a combination of an accredited Bachelor's degree in Chemistry, Bacteriology or a related field, plus three (3) years professional laboratory experience including one (1) year each of operating advanced spectrophotometry, chromatography or other comparable instrumentation, and of working in a supervisory capacity.

<u>Licenses and Certificates</u>: Texas Class "C" Driver's License or equivalent license issued by another state.

